

■The earth, as one of the sources of the universe, is full of diversity and change. With the advent of mountains in the third geological era, life on Earth began and expanded slowly. Early humans took refuge in mountains and caves to survive natural disasters and predators. The paintings carved on the walls of the caves show the movement and human life in them for a long time, and as a result, the mountains became a safe place for humans and the connection between humans and nature was formed. Humans have learned well over time how to live and survive in nature, but with the onset of urban life, man quickly moved away from nature.

Now, after centuries and human ignorance, the earth is severely damaged and the pattern of life needs to be reconsidered for the survival of the earth.

Increasing the presence of people and hiking in nature has result in widespread entry into mountainous and highlands. This unbridled entry, in addition to exceeding the environmental capacity of these areas, but also the lack of a written and implemented model and instructions has led to the opening of new routes.

The people of the Iranian plateau have always been present in nature and mountains due to the arid and semi-arid climate and the nomadic way of life. The presence of people and their entry into the natural environment and mountains originates from their culture and traditions towards nature. Among the many factors affecting the destruction of the mountain are the following:

- 1-Extensive presence of people in the mountain environment
- 2-Creating noise that leads to fear of wildlife in the environment and declining habitat quality.
- 3-Implementing wrong and destructive tours of the environment, such as the Festival of Medicinal Plants in Iran (picking plants with medicinal and medicinal properties), which has become common and widespread today due to people turning to healthy and organic life.
- 4-Ambiguity in the laws of protection of mountainous areas
- 5-Lack of instructions in the field of managing hiking and mountaineering routes
- 6-Lack of executive management in national parks and protected areas
- 7-Multiple organizations in charge of mountaineering activities such as: Environmental Protection Organization, Ministry of Cultural Heritage, Handicrafts and Tourism, Mountaineering Federation, organizations affiliated to the Ministry of Interior

The above-mentioned cases have led to the disturbance of Iran's mountainous natural areas and the increasing development of nature-based tourism has also created a kind of confusion in this field.

The Mountaineering Federation invited a group of environmental, mountaineering and environmental experts such as geomorphology, meteorology and climatology to cooperate and provide preventive solutions to prevent the destruction of nature. After holding several meetings, the members emphasized that in order to preserve biodiversity and minimize the amount of damage to the environment, a suitable route called "Green Mountain Route" should be determined, which is consistent with the sustainable development of the mountain environment in the long time.

Overview:

An approach to nature sustainability and provide a codified method called instruction (executive instructions) and also provide a model to organize mountaineering trails and nature tours to prevent further destruction of Iran's mountain ecosystems, introduction of wildlife habitats, plant habitats, natural and human attractions

Objective:

Carrying out a plan to organize Iran's mountaineering routes to prevent the increasing destruction of the mountain environment as a result of the direct impact of heavy traffic on the one hand and to prevent the increase of encroachment on the unique areas of the mountain ecosystem on the other hand

■ **Expected Results:**

- 1-Managing the traffic of people to mountainous areas according to the environmental capacities
- 2-Increasing the number of trained people entering the mountains with expert guides
- 3-Identifying the potentials of mountaineering trails and mountaineering routes (capacity measurement)
- 4-Lack of development of new trail and routes in sensitive habitats and habitats of sensitive areas
- 5-Conservation of biodiversity (endangered species, endemic, relic, rare)
- 6-Protecting the intangible heritage of local communities
- 7-Empowerment and awareness of local communities
- 8-Participation and ownership of local stakeholders
- 9-Preventing off-road

Due to differences in ranking and the importance of factors affecting the destruction of mountainous areas of the world and also taking into account the natural and human geographical characteristics of Iran, the increasing entry of untrained people into the mountains is one of the most important factors in pollution and environmental degradation.

It took 6 months for a team of 8 experts in meteorology, climatology, geomorphology, social sciences, mountaineering, environment and landscape design to develop a general guideline for identifying and designing a green route. The main purpose of the "Green Mountain Trail instruction " is to select and determine a special route to climb the mountain peak with respect to reducing environmental consequences and increasing safety.

Performance:

Based on environmental considerations and criteria and mountaineering components of the instruction, first of all, the best and safest special route that has the standards and principles presented in the green mountain route was selected and then carefully operated by experts in the region.

To carry out the pilot project, the highest mountain of Gilan province, Sumamous with a height of 3703 meters a.s.l, located in the south of the Caspian Sea in the Alborz Mountains was selected. The considerable height and the presence of ancient forests and Ice Age relics (Hyrceanian forests) on its slopes were the two main reasons for choosing Mount Sumamous.

Three main groups were involved in the implementation phase of the Green Mountain Route:

- 1-Iranian Mountaineering and Climbing Federation with provincial and city subdivisions
- 2-Mountain environment experts and landscape and route design
- 3-Managers and local community.

In the implementation phase, with the presence of a research group and a group of climbers, all the climbing routes to Samamous Mountain were identified and after evaluation, 5 major climbing routes were surveyed. Following the guidelines of the Green Route, the northern route of Samamous Mountain (Jurdasht village route) was selected as the best route.

Various trailers reached the summit from the northern front, among which a route was identified as a suitable route and introduced as a green mountain route. Then, with the presence of a team of route design experts with the help of the local community, signage, warning and interpretation boards were installed in accordance with all the principles provided in the procedure. This was done in 90 days and the project was inaugurated in September 2016.

The distinguishing feature of the design

- 1- Intangible education of the local community about the use of appropriate and environmentally friendly tools in the mountains
- 2-Awareness and information to mountain communities, especially in the Alborz mountains
- 3- Successful implementation of a mountain environment plan and coordination between government departments and the private sector to cooperate and remove various obstacles such as financial and legal barriers.

- 4- Accompanying and face-to-face participation of experts preparing the route guide with local stakeholders
- 5- Implementing an environmental plan while generating revenue and increasing the economic power of the local community

General goals

- Protection of ecosystem and sustainable development of mountain environment
- Protection of the intangible heritage of local communities in mountainous and foothill areas
- Participation of local communities with the aim of intangible education of local communities in order to protect the natural environment
- Empowering local communities through the development and organization of eco-tourism resorts
- Receiving a license from the relevant authorities to enter mountainous area and mountaineering

■ Today, in the global ranking, the tourism industry is one of the most important industries in the cultural, social and economic contexts, which has developed rapidly in recent years and has become one of the largest sources of income in the world. Experts and international organizations have divided tourism into cultural, historical, religious, nomadic, commercial, health, adventure-sport, nature, and geotourism according to different criteria. Due to the nature of the mountains, part of the nature tourism and geotourism activities are done in mountainous areas.

The main purpose is to provide principles and strategies for the sustainability of mountain landscapes and their development in the form of physical and functional development. Protection of natural heritage, strengthening and promotion of mountain tourism and creating a suitable environment for a variety of recreational - tourism activities and research are among the goals of designing such environments. This project has been done with the aim of organizing and managing mountaineering and suitable mountaineering trails.

Therefore, the emphasis of the project is on the issue of mountains and outdoor sports and activities, including nature-oriented tourism and mountaineering. In fact, this is an environmental project designed to enhance the physical and mental capacity of people to live long, healthy lives and maintain a natural environment. Despite the efforts and actions taken by the Federation of Mountaineering and Sport Climbing, mountain tourism in Iran has had negative

consequences for mountainous areas. One of these harms due to the large presence of tourists in mountainous areas in most parts of the country is the development of abundant sanctuaries regardless of environmental criteria. The development of new routes and non-use of existing routes has led to the development of numerous dirt routes and soil erosion in mountainous areas. Some of these routes, regardless of the protected areas in the mountains, have created negative conditions for the creatures.

In Iran, arid climate and average annual rainfall of about 235 mm is one of the main reasons for people tending to the mountains for leisure, recreation, entertainment and sports. At the same time, mountainous areas lack efficient environmental management. This may not be very justifiable for many mountainous areas, for example in Europe and the foothills of the Alps.

In addition to combining environmental conditions and outdoor sports, environmental values and the safety of climbers have been considered in the designed trails.

■ Tourism is centered on the presence of nature for a period of time that has spread all over the world and every day we see the emergence of new sub-branches in various nature-related sports, including mountaineering.

The presence of conscious and responsible human beings in nature not only does not cause the destruction of nature for future generations, but with the presence of more of these kind of people in nature, we see human beings flourishing through visual sense, breathing fresh air, etc. from nature, which ultimately leads to peace. It will reach the macro level of society, and on the other hand, we will see self-healing and the restoration of endangered plant and animal species in nature in the long run.

The increasing expansion of urban communities and the spread of information through the Internet and cyberspace in this period has made people better understand each other. It also allows us to see and touch how other people from other places in the world reside, live, work, play, and what their interests are, which is the strongest motivation to move to new and unknown pristine mountain places.

Without a doubt, the dissemination and promotion of information, regardless of education, infrastructure, monitoring, support and protection, is a very dangerous task that will occur in different societies in different ways. Information in public places, etc. But in developing countries, where issues are indifferent to the basics, it will be seen as a complete destruction of nature and the environment.

Without a doubt, the dissemination and promotion of information, without regard to education, infrastructure, monitoring, support and protection, is a very dangerous task that will occur in different communities in different ways. In advanced societies, these harms are manifested in the form of amendments to regulations, installation of signboards, information in public places, and to the public, but in developing countries, which are indifferent to the basics, they are seen as complete destruction of nature and the environment.

The method of the Green Mountain route, as the first provider of construction patterns and treatment of mountainous nature in Iran, tries to expand human affection for nature as much as possible so that future generations can use and protect it. If the provisions of this policy are used and implemented correctly, in the not too distant future, mountainous nature will have the opportunity to continue its life.

For example, suppose a mountain that has eight ascent routes to reach the top of the mountain is disturbed and destroyed by all kinds of environmental damage and so on. Now, let's assume that only one of the eight routes is allowed to pass, and that is with an official permit. Naturally, all seven routes, or better to say 85% of the mountains, will survive in their natural peace and quiet and will have the opportunity to rebuild themselves.

The use of a single special path of the green mountain route has the following benefits:

- 1 -Creating a safe route for all mountain-related sports
- 2 -More participation of local stakeholders with mountaineers
- 3 -Providing a bed and creating infrastructure for mountain-related sports

- 4 -A suitable place for holding all kinds of mountain sports competitions
- 5 -The sense of sportsmanship and the desire of local communities to do sports related to mountaineering
- 6 -Improving the quality level of mountaineering and creating interaction between mountaineering groups in the region
- 7 -Less destruction of nature
- 8- Increasing the protection of sensitive and vulnerable ecosystems

■ With the correct implementation of the Green Mountain Path in mountainous areas, the indigenous people present in the region (local communities) as the host community with the increase of sustainable employment are the first people who will benefit from the arrival of sports tourists as the guest community. The mountainous villages and hamlets of the mountains of Iran often have fragile economies due to their remoteness from large cities, low traffic, as well as in terms of terrain, high slope, low rainfall, etc. The presence of trained individuals and groups as guest communities will play an important and constructive role in the economic, cultural and social prosperity of the host communities. Climbers in the region are in dire need of three indicators: transportation, accommodation and food.

-Transportation

- 1 -Traffic from the last point of the city to the last village by motor vehicle
- 2 -Moving equipment and people to the beginning of the mountaineering route by motor vehicle or using domestic animals
- 3 -Traffic in a mountainous area using the step-by-step presence of a local guide

-Accommodation

- 1 -Using the houses of local communities as a place of rest and rejuvenation
- 2 -Accommodation in ready-made campsites managed by local communities
- 3- Climbers camping in a safe place at the end of the village to climb

-Food

- 1 -Buy food supplies from local community stores such as canned food, eggs, etc.
- 2 -Using traditional foods of local communities such as bread, dairy products, stews, soups, etc.
- 3 -Using restaurants, fast food, etc. in the area with local management
- 4- Buying garden, forest, agricultural and handicraft products of local communities

Local communities will also be affected by their continued presence in the region and their connection to their guest communities, and the impact of mountaineers' social behaviors, culture, etc. on local communities is inevitable. By emphasizing the preservation of cultural values and providing appropriate models for empowering the economy of the local communities of the foothills, the Green Mountain Route can play an important role in the voluntary participation of the parties of the host and host communities.

The effects of these partnerships on host communities can include:

- Strengthening the sense of ownership and high value of the natural environment of the region
- Strengthening the athletic spirit among talented people, especially young people
- Strengthen the sense of conscientiousness and role in local management
- Strengthen the correct attitude towards the future by creating protection of environmental assets
- Strengthening the sense of presence of young people to participate in mountaineering training classes (local leader)
- Discover your important traditional and cultural resources such as indigenous games, dances, cooking, storytelling and...
- Better understanding of the geological and geological features of the region
- Keeping alive the memories of great people, veterans and how they treat nature
- Increasing the participation and ownership (Governance) of local communities
- Increasing the employment rate and participation of local women
- Increasing the investment of villagers in rural areas with the aim of attracting tourists

And this can bring together the presence of people with different tastes and perspectives in presenting to achieve a goal and strive for it.

The role of these effects in the guest community is so great that he can return to the area again and again and at each time to introduce different people to the area and about the natural beauty and the role of local communities in maintaining the natural environment. On the other hand, in terms of high natural potentials of mountain environment and technological advancement, guest mountaineers can play an important role in economic investment and transfer of new technologies to local communities such as construction of modern mountain ecosystems, waste disposal, clean energy, natural paths etc.

■ Most of the mountainous and mountainous villages in Iran are governed by local regional associations (village associations, councils, villages, local cooperatives) or by local elders. The role of such associations is very important for economic decisions and most villagers accept and implement the vote. In the pilot project of Green Mountain Route of Experts, through meetings with elected officials and trustees of local people, two important areas (Ghasemabad and Siakhlrud settlements) and (Jourdasht settlements) with special geographical location, several meetings were held and the project points of view were explained to them.

Since the design of the green mountain route is in line with organizing and managing mountaineering and nature tours, it is naturally related to sports tourists. In addition to identifying, selecting, and implementing a safe green route, this project performs a range of important ancillary activities. This set of side activities related to the issue of incoming tourists to the village of Javaherdasht is important from both a negative and a positive point of view. The influx of tourists, despite all the positive economic benefits, has sometimes led to socio-cultural conflicts due to the local population living near the Ascension Camp.

Considering this issue, the green mountain route of Javaherdasht village was chosen by a suitable side road that goes around the village and reaches the beginning of the mountaineering route. This route uses the village belt that was previously constructed after the main village square.

Other side activities of this environmental protection plan include the following:

- Organizing eco-tourism houses
- Organizing local guides of Mount Samamous
- Organizing and training drivers

- Organizing local cars carrying tourists in a coherent complex
- Creating a green mountain route website and an Instagram page for a practical and purposeful introduction
- Development of food supply stores
- Participation of non-governmental organizations (NGOs) in the educational, research and executive sectors
- Educate local communities by publishing booklets, brochures and photos of green plants and animals

This ultimately leads to an increase in the economic income of the local community through the entry of sports tourists and distance from harmful activities such as the sale of valuable land for livelihood and false income.

By conducting meetings of the group of experts, the Green Mountain route was paved with environmental activists concerned with the protection of the region. The cooperation of cultural associations was based on cultural foundations.

Samamous mountain (the place of the project) is a holy mountain in the eastern region of Gilan province. The language and culture of the political region of East Gilan has been greatly weakened. By carrying out activities such as preparing a geographical map of the routes to climb Samamous Mountain and using native words (unlike most maps produced in Iran), a map was produced using local dialect and pronunciation. The same thing was done in the commentary board. Attention to the local language and dialect of Galshi, and its introduction in conjunction with the cultural role of Mount Samamous with the publication of a book on the subject, sufficient motivation of cultural associations to enter and cooperate in this field. With these incentive policies, we saw the participation of all NGOs in the completion of this project.

The idea of Green Mountain Route was studied under the supervision of the Iranian Mountaineering and Sport Climbing Federation for the first time as a pilot in Gilan province (in the northern part of the Iran and adjacent to the Alborz Mountains) for the highest peak of Gilan, Samamouse peak (in the Rudsar city).

Very close collaborations took place between several government agencies to prepare and doing this methodology, for example, the following organizations participated in this work, including: Surveying organization to prepare accurate large-scale topographic maps, Meteorological organization to provide precipitation statistics and atmospheric parameters anomalies in recent years, the Mountaineering and Sport Climbing committee of Gilan Province, for the use of

professional mountaineers who have previously traveled to the samamouse peak, the Environmental Protection Organization of the Guilan Province to obtain the desired areas and identify protected areas and identify endangered species, Also Rudsar city governorate for more coordination with local communities involved in the pilot project area, Ministry of Energy to identify springs, Forests and Rangelands organization to identify forest reserves and forest parks, Housing foundation to identify target villages, Ministry of Cultural Heritage, Industries Manual and tourism to identify man-made tourist attractions.

After preparing the patterns and specifying the strategic document - the method of the Green Mountain Route doing-the experts, after approving the specialized teams, referred the implementation method to the executive team.

Also, after the field visiting of the area and surveying, the executive team selected the areas with the highest mountaineering efficiency and the least damaging environmental impacts and announced the costs of the work to the experts in relation to the requested works. Since the main goals for the prospect of the Green Mountain Route, is to raise the quality level of mountaineering on the one hand and to improve the cultural-economic level of local communities on the other hand, it was decided that the cost of doing this project to be paid by government and local organs of the region under the name of rural and ranchers cooperatives of the same region. Most of the people who work in the cooperatives are all villagers and they are trusted and relievable, so for more trust and also a sense of interaction, the way of working for the rural and nomadic cooperative company was explained and agreed upon. Also, to coordinate and approve the budget, the executive plan was reviewed and approved by the officials of Rudsar governorate (geographical and political location of the mountain). After various approvals by the governmental organizations of the region and before starting the operational work, a meeting was held in the village (Javaherdasht) with local officials, including Dehyari and the village council, and explanations were provided to them. In this meeting, the operational team also requested that people be introduced to the executive work (simple worker) who are more familiar with the area in order to establish operational work.

B:

Regardless of natural factors such as soil type, steep slope, lack of water availability, etc., Working in a mountainous environment is problematic because of lack of equipment and skilled mountaineering workers that are familiar with environmental issues. In developing countries, the use of human resources is much more economical than the use of modern equipment and new technologies. For example, in most Mountain areas, Carrying materials and cargo of climbers are done by domestic animals and at very high altitudes by Sherpas, while in most developed countries this is done by helicopters with different capabilities. The mountain will always be the scene of various events for the people who are there, so the person who is selected to work in the mountain environment should not be an ordinary person, he should be familiar with working with technical equipment and have good physical strength. Various factors such as what has been

said are involved in the execution of work in the mountains. For these reasons, the cost of working in the mountains is higher than working in urban areas.

- Increasing the salary of workers for working in the mountain area
- Lack of sufficient mountaineering and environmental information in the area
- No permanent residence in the area to rejuvenate
- local people do not help to foreigners who have entered the mountainous area to work

The use of local people, in addition to the above, has numerous benefits that make any foresight plan pay attention to:

- Creating the sense of belonging
- Creating alliances between people in local communities for a sense of work in the region
- Creating economic prosperity and turnover in the village
- Provide a large part of the hidden costs that are not included in the project
- Full knowledge of the tracks in the area and complete knowledge of the environment
- Having the sufficient physical strength to establish a long time in mountainous areas
- Providing and maintaining the work done in terms of ownership

In developing countries such as Iran, where more than half of the land is mountainous, carrying out the Green Mountain Route project is not an easy task, and as mentioned in the previous section, the project was funded by the Rudсар County Governor's Office. . The funding budget was part of the national pilot budget for the Green Mountain Route project on Mount Samamos in Rudсар. The other part of the project was funded by local people and stakeholders (researchers, executive operations, etc.).

The Green Mountain Route project and its national pilot project have been completed with the cooperation of human resources from the following authorities:

Iranian Federation of Mountaineering and Sport Climbing

Guilan Province Mountaineering and Sport Climbing Committee

Rudсар County Mountaineering and Sport Climbing Committee

Iranian Mountain Environmental Protection Association

Guilan Cultural and Natural Heritage Preservation Association

Dehyari of Javaherdasht village

Local people

The researcher team of Green Mountain Route plan

C:

Several methods were used to disseminate and introduce this project and its activities:

- 1- The Green Mountain Route document has been published in electronic form by the Iranian Mountaineering and Climbing Federation and has been presented in its digital library.
- 2- The Samamos Mountain, as a natural heritage of Iran, was registered in the list of natural heritage of Iran.
- 3- A map of the Samamos peak and the topographic conditions around it were published in the country along with the introducing the Green Route of Samamos
- 4- The book of Samamos, entitled Samamos, the Invisible Appearant, was published for introducing the natural and human features of this peak and introducing the Green Route of Samamos
- 5- An interpretive board introducing Green Mountain Route, Samamos, with dimensions of 2 meters by 2 meters, was installed at the beginning of Javaherdasht settlement.
Installation of sign boards, Installation of warning signs Installing trash, photocells, etc.
- 6- Several printed and electronic articles were published to introduce Green Mountain Route of the Samamos peak
- 7- The Samamos website, and the instagram page related to Green Mountain Route of Samamos peak have been created.